

COMPUTER AND INFORMATION SCIENCES: CYBERSECURITY (CERT)

CERTIFICATE OF ACHIEVEMENT

Upon completion of the Cybersecurity Certificate of Achievement, students will be able to use their newly learned skills to gain entry-level jobs and use the certificate for professional growth, salary increases, job promotions, or career changes in the area of information security/assurance.

Program Student Learning Outcomes

- Students identify common network protocols.
- Students recognize common risks and threats in information systems.
- Students configure security settings on network devices.
- Students collect digital forensic evidence.
- Students carry out network scanning for open ports and IP addresses.
- Students create simple scripts in a programming language.

Program Requirements

Code Number	Course Title	Units
Required Courses		
CIS 170L	Cybersecurity Fundamentals	3.5
CIS 170P	Introduction to Ethical Hacking	3.5
CIS 170R	Computer and Digital Forensics	3.5
CIS 170S	Network Defense	3.5
or CIS 170I	Cisco Network Security	
Select at least 3 units from the following electives:		3.0-3.5
<i>Programming</i>		
CIS 103	Computer Programming Logic (3.5)	
CIS 164	JavaScript Programming (3.5)	
CIS 183	Java Programming (3.5)	
CIS 185	Discrete Structures (3)	
CIS 189C	Special Topics in Software Development (3)	
And Select at least 3 units from the following electives:		3.0-3.5
<i>Networking</i>		
CIS 170A	Networking Fundamentals (3.5)	
CIS 170B	Network + Certification (3.5)	
CIS 170H	TCP/IP Fundamentals (3)	
CIS 170I	Cisco Network Security (3.5) ¹	
CIS 170S	Network Defense (3.5) ¹	
CIS 171A	Introduction to Cloud Computing (3)	
CIS 200A	Apple Mac OS Support Essentials (3.5)	
CIS 212	Introduction to Microsoft Windows Administration (3.5)	
CIS 213F	Microsoft Windows Server Administration (3.5)	

CIS 214	Unix and Linux Operating Systems (3.5)	
Total Units		20-21

¹ Cannot be double counted for Required Courses